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The Consultants' Fair: An active learning pedagogical methodology for large groups

Merce Mach, Pilar Saldaña

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//Abstract

INTRODUCTION. This study provides empirical evidence of how active learning methodologies contribute to developing students' competencies and improving their satisfaction in large classroom settings. The study examines two group-based methodologies: i) «You be the Consultant» (a case study project in which participants analyse an organizational challenge and suggest strategic solutions); and ii) the «Consultants' Fair» (an active learning methodology to pool the group project). **METHODS.** We used a longitudinal research design with a sample of 250 students (50 teams). We collected data at two points while students were completing their projects. Students self-assessed their characteristics, competencies, and satisfaction. The dependent variable (team performance) was collected from various sources. **RESULTS.** Our findings reveal that satisfaction mediates the relationship between individual differences (self-assessed competencies, conscientiousness, and self-efficacy) and team results. Furthermore, qualitative feedback provides evidence of the fast learning curve for competencies. **DISCUSSION.** The «Consultants' Fair» promotes practice-based training, in which students are given time to practice their competencies. In terms of class dynamics and due to the learning by teaching methodology, the use of time is more efficient because students practise competencies simultaneously and consecutively. The initial strain of talking in front of an audience disappears gradually as students repeat their speech to their «visitors» consecutively; this is «learning by doing».

//Keywords

Active learning methods; Oral presentation competencies; Case study; Learning by doing; Learning by teaching; Large groups.

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//Authors' information

Merce Mach. Associate Researcher and Lecturer. Department of Business - Faculty of Economics & Business, University of Barcelona, Spain. merce.mach@ub.edu, ORCID: <http://orcid.org/0000-0002-0109-1122>

Pilar Saldaña. Tenured University School Lecturer. Department of Business - Faculty of Economics & Business, University of Barcelona, Spain. pilarsaldana@ub.edu, ORCID: <http://orcid.org/0000-0002-5663-5051>

//Títol

La Fira de Consultors: Una metodologia de pedagogia activa per a grups grans

//Resum

INTRODUCCIÓ. Aquest estudi proporciona evidències empíriques sobre la contribució dels mètodes d'aprenentatge actiu en el desenvolupament de les competències i en l'augment de la satisfacció dels alumnes en grups grans. L'estudi examina dues metodologies basades en els grups: 1) «Ser el consultor» (un projecte d'estudi de cas en què els alumnes diagnostiquen un repte organitzatiu i suggereixen solucions estratègiques, i 2) la «fira de consultors» (una metodologia d'aprenentatge actiu per posar en comú els projectes dels grups). **MÈTODE.** S'ha aplicat un disseny de recerca longitudinal a una mostra de 250 estudiants (50 equips). La recollida de dades, per autoavaluar les característiques individuals, les competències i la satisfacció, s'ha fet en dos moments diferents, mentre els estudiants duïen a terme els seus projectes. La variable dependent (rendiment de l'equip) s'ha obtingut de diferents fonts. **RESULTATS.** Els resultats revelen que la satisfacció media la relació entre les diferències individuals (les competències autoavaluades, la meticulositat, l'autoeficàcia) i els resultats de l'equip. A més, la retroalimentació qualitativa també proporciona evidències sobre la ràpida corba d'aprenentatge de la competència. **DISCUSSIÓ.** La «fira de consultors» promou la formació a través de la pràctica, ja que permet tenir un temps específic per practicar les competències. Pel que fa a la dinàmica del grup classe, i gràcies al mètode d'ensenyar als altres, l'ús del temps es fa més eficient perquè els estudiants practiquen les competències de forma simultània i consecutiva. Les pors inicials per parlar davant de l'audiència desapareixen gradualment a mesura que els estudiants repeteixen la presentació als seus «visitants» consecutivament; això és «aprendre fent».

//Paraules clau

Mètodes d'aprenentatge actiu; Competències per parlar en públic; Estudi de casos; Aprendre fent; Aprendre ensenyant; Grups grans.

//Título

La Feria de Consultores: Una metodología de pedagogía activa para grupos grandes

//Resumen

INTRODUCCIÓN. Este estudio proporciona evidencias empíricas sobre la contribución de los métodos de aprendizaje activo en el desarrollo de las competencias y la satisfacción de los estudiantes en clases grandes. El estudio examina dos metodologías grupales: i) «Ser el Consultor» (un proyecto de estudio de caso en el que los participantes diagnostican un reto organizacional y sugieren soluciones estratégicas); ii) La «feria de consultores» (una metodología de aprendizaje activo para poner en común el proyecto grupal). **MÉTODO.** Utilizamos un diseño de investigación longitudinal en una muestra de 250 estudiantes (50 equipos). La recogida de datos se realizó en dos puntos diferentes mientras los estudiantes estaban completando sus proyectos, para autoevaluar las características individuales, las competencias y la satisfacción. La variable dependiente (rendimiento del equipo) se recopiló de diferentes fuentes. **RESULTADOS.** Los resultados revelan que la satisfacción ejerce un proceso de mediación en la relación entre las diferencias individuales (competencias autoevaluadas, la meticulosidad, la autoeficacia) y los resultados del equipo. Además, la retroalimentación cualitativa también proporcionó evidencias sobre la rápida curva de aprendizaje de la competencia. **DISCUSIÓN.** La «feria de consultores» promueve la formación a través de la práctica, ya que permite a los estudiantes tener un tiempo específico para la práctica de competencias. En términos de dinámica del grupo clase y a través del método de enseñar a los demás, el uso del tiempo es más eficiente porque los estudiantes practican las competencias de forma simultánea y consecutiva. Las aprensiones iniciales de hablar frente a una audiencia desaparecen gradualmente a medida que los estudiantes repiten consecutivamente su presentación para sus «visitantes»; esto es «aprender haciendo».

//Palabras clave

Métodos de aprendizaje activo; Competencias de hablar en público; Caso de estudio; Aprender haciendo; Aprender enseñando; Grupos grandes.



1. Introduction

Have you ever had former students return the following year and ask permission to attend one of your classes? Or have you ever had ninety students waiting outside the classroom thirty minutes before the class is scheduled to start? This happened when the first author was teaching a human resources management (HRM) course; a mandatory, second-year undergraduate class at a business school in a European, non-English-speaking country. These and other experiences led her to analyse what factors could explain such an exciting response among students.

This study examines the «You be the Consultant» project and «Consultants' Fair» pedagogical methods to understand why students were so interested in them. Why were students so committed to these activities? Our hypothesis is that the active learning methodologies used as teaching and learning tools helped to create the right context to develop students' managerial competencies and improve their satisfaction levels in these large classroom settings (75–90 students).

Our study aimed to provide empirical evidence on the contribution of these active learning methods to improve students' competencies and satisfaction. To achieve this, we developed a research model to test that student satisfaction mediates the relationship between individual differences and team results.

The learning experience context

Lectures are the main method of instruction at traditional higher institutions, although practical and applied sessions must be implemented to comply with the Bologna higher education treaty in Europe. Although current learning theories emphasize the need for students to construct their own understanding, the traditional, instructor-based teaching by telling» focus is still the predominant practice (Feden, 2012).

Furthermore, when large groups are taught, it becomes essential to apply a more interactive, student-centred focus. Empirical research provides strong evidence of the importance for learners of playing an active role in constructing knowledge. Active learning increases student performance (e.g., Barr & Tagg, 1995; Freeman et al., 2014). Similarly, the active learning strategy has been used to improve students' competencies.

Another contextual characteristic of management studies is the increased tendency to use English as the language of instruction. An increasing number of students are learning through the medium of English, even if it is not their native tongue (Dearden, 2014; Lueg & Lueg, 2015).

Additionally, scholars have found that one of the biggest barriers to effective oral presentations is nervousness and anxiety, known as public-speaking anxiety (Arnaiz & Guillen, 2012; Rolls, 1998). For non-native English students, this anxiety may be even more intense, as they must make even greater efforts to present the material in English. Reducing the size of the audience (from 80 to 5 people) is especially worthwhile, as it diminishes students' stress levels when they give oral presentations (Arnaiz & Guillen, 2012; Dearden, 2014).



To overcome these problems and promote students' learning and understanding, we implement an active, constructive process of teaching and learning (Ritchhart et al., 2011).

2. Description of the proposed activities

The pedagogical group methodology: "You be the Consultant" and the "Consultants' Fair"

"You be the Consultant" and the "Consultants' Fair" are two pedagogical, active learning techniques that create the context for student participation in small groups (generally groups of five). The "Consultants' Fair" is used to pool the teamwork project "You be the Consultant". Thus, the "Fair" is preceded by a 10-week case study performed as a group project.

Students choose an organization with a potential people-based challenge or problem to solve. The project consists of performing a diagnosis, and suggesting organizational solutions (Burgoyne & Mumford, 2001; Wasserman, 1994). To prepare their executive reports (approximately 15–20 pages), students must research, develop and prepare a short case study on the organization's present challenge and their proposed solutions, in keeping with existing human resources management (HRM) and/or organizational behaviour (OB) strategic theories.

The "Consultants' Fair" is where the groups present their case study projects, using posters as visual support. It is organized so that the teams can pool and share their conclusions. Lecturers can divide the "Fair" into a 2-day format or an entire morning (either 2 or 4 hours). The class must be split into two. Half of the groups will be presenters, and the other half will be "visitors". The next day (or the second half of the class), the roles are reversed.

Thus, every consultant group will simultaneously present their work to a peer group. The presenting groups must stand in a small space, as if they are at a stand at a trade fair, with a few chairs for the visitors. The visitors move from stand to stand (in fact, under the posters), and spend approximately 15 minutes listening to the presenters and asking questions about the company in question. Visitors are also asked to assume an active role by providing feedback on the presenters and the poster through a "Visitor's Grid". Each visitor receives several questionnaires that they must fill in for every presentation (see *Annex 1* for the form that visitors use for their assessments). This quantitative and qualitative feedback is returned to the team members the day after the "Fair" (see *Annex 2* for further information), along with the instructor's grades for both assignments: the "You be the Consultant" company report and the poster for the "Consultants' Fair".

All students must be active, with some presenting and others listening at first, followed by the assessment (Donia, O'Neill & Brutus, 2015). Presenters must give their oral presentations six or seven times consecutively to different small audiences every time.



Effectiveness

The “You be the Consultant” and the “Consultants’ Fair” pedagogical techniques promote and allot a specific amount of time for students to practise their core managerial competencies: specifically, teamwork and oral presentation skills. In terms of class dynamics, time is used more efficiently because students practise their competencies simultaneously and consecutively. It also provides “training through practice” for the oral presentation competency. Teams must describe the organizational problem and propose solutions several times, helping them to gradually become more accurate, focused and precise. The initial strain disappears as students repeat their presentations to their consecutive visitors. In so doing, they are clearly “learning by doing” (Ambrose et al., 2010; Biggs, 2011).

Furthermore, the “teaching others” methodology has the highest efficacy ratio in terms of retention (Biggs, 2011). Likewise, the learning methodology reported in this study requires students to be highly involved and active as they perform the “simulation” (they are consultants providing solutions), after previously carrying out research to draft the case study and apply HRM and organizational theories.

Although the contribution of active learning is recognized as improving students’ performance (Freeman et al., 2014), our assumption was that it would lead to greater group satisfaction and learning, because students not only build a case study (the written report), but also prepare a poster and present and discuss their solutions with others. Overall, these methods contribute to help students to summarize and make their presentations even more attractive.

3. Methods

Participants and setting

Our sample included 250 undergraduate business administration students (63.6% female and 36.4% male, with a mean age of 20.7) who volunteered to participate in this study as part of their course assignments, but without any extra credit for their final class grades. The 15-week class was mandatory and taught entirely in English in a non-English speaking southern European country.

Students’ grades for this class were 50% for individual work (30% corresponding to 4 quizzes and 20% to weekly case studies and assignments), and 50% for team work (20% for the group “You be the Consultant” case study report, 20% for the poster and the “Consultants’ Fair” presentation, and 10% for a final integrative case study). Thus, the students’ projects included in our study represented 40% of their overall course mark.

Data collection

The research design was longitudinal. We collected qualitative and quantitative data from three undergraduate HRM courses. The field work involved collecting data during Week 5 of the class, when the groups had already been formed. Participants were asked to fill in

the first questionnaire, which measured individual competencies, the self-efficacy trait scale, and some demographic data. During Week 11, all the groups handed in their executive "You be the Consultant" reports. During the following week (12), they presented their posters at the "Consultants' Fair", and individually completed Questionnaire 2, which assessed their conscientiousness, work satisfaction, self-efficacy constructs, and competency levels.

Students' final grades for the class were published during Week 15. However, during Week 12 (the same week as the "Fair"), students received a summary of their peers' evaluation results (from the "visitors") and the ranking of the posters (created with the addition of team grades according to the visitor grids). Finally, the instructor provided grades for the posters and executive reports at the end of the semester (Week 15).

Measures

Conscientiousness. This refers to the degree to which a person is responsible and goal-oriented, and is used to assess respondents. We assessed conscientiousness through a 9-item sub-scale of the Big Five Questionnaire (Costa & McCrae, 1992). Respondents indicated their agreement with each statement on a 5-point Likert scale, ranging from 1 ('Disagree strongly') to 5 ('Agree strongly'). Cronbach's alpha was 0.75. A sample statement was: *"I see myself as someone who... is a reliable worker."*

Self-efficacy. We examined peoples' belief in their competencies to successfully perform a specific task, because it determines how much effort they will expend (Bandura, 1986). We measured this through 10 items from the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995). All items were scored on a 4-point rating scale ranging from 1 ('Not at all true') to 4 ('Exactly true'). Cronbach's alpha was 0.81. A sample item from the scale is: *"It is easy for me to stick to my aims and accomplish my goals."*

Satisfaction. The appraisal of job experience illustrates how a person feels and thinks about their job. We used 3 items from the Job Satisfaction Scale (Hackman & Oldham, 1975). All items were scored on a 7-point scale ranging from 1 ('to no extent') to 7 ('to a very great extent'). Cronbach's alpha was 0.76. A sample statement is: *"I am generally satisfied with the work I did in my team project."*

Competencies. To measure competencies (the ability to do something well or efficiently when using the English language), we asked students to self-assess five managerial competencies (oral presentations, time management, teamwork, self-confidence, and interpersonal skills) using the competencies scale developed by Baruch and Peiperl (2000). Participants self-evaluated themselves on an 8-point Likert scale ranging from 1 ('very low') to 8 ('extremely high'). Cronbach's alpha was 0.87. A sample item is: *"Evaluate yourself on these competencies when you use the English language..."*

Team performance. The dependent variable (team performance) was measured once students had completed their projects and from two independent sources: i) the peer evaluation grid completed during the "Fair"; and ii) the lecturers' grades (based on the poster content and features, and the teams' written executive reports).

Procedures¹

We recorded all of the visitors' information to provide the students' feedback. We then analysed the web-based survey data using the SPSS v.23 statistical package and the PROCESS macro developed by Hayes (2003), which assesses mediation effects. This macro estimates the model coefficients using an ordinary least squares (OLS) regression-based path analytical framework, and employs the recommended bootstrapping methods (Mackinnon, Lockwood, & Williams, 2004) to probe the significance of the indirect effect. We used a 10,000 bootstrap resample, and a bias-corrected 95% confidence interval (CI) for our analyses (Preacher, Rucker, & Hayes, 2007). Before testing the hypotheses, we also checked the psychometric properties of the measures and their discriminant validity.

4. Results

Table 1 provides descriptive statistics including means, standard deviations, and correlations for all study variables.

Table 1
Descriptive statistics, correlations and reliability

	Mean	SD	1	2	3	4	5
1. Self-efficacy	3.18	0.39	(.809)				
2. Conscientiousness	3.88	0.58	.295**	(.746)			
3. Competencies	6.00	1.10	.497**	.262**	(.869)		
4. Satisfaction	5.81	0.93	.456**	.218*	.552**	(.761)	
5. Performance - Poster presentation (peers)	21.86	1.13	-.014	.005	.127	.293**	--
6. Performance - Poster mark (lecturer)	88.38	14.69	.083	.114	.176*	.404**	.510**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The mediating role of job satisfaction

Table 2 shows the influence that the development of competencies had on satisfaction ($a=0.45$) and that satisfaction had on the peers' performance evaluation ($b=0.28$) and on the lecturer's performance evaluation ($b=4.99$). A bias-corrected bootstrapping 95% confidence interval (CI) for the indirect effect ($ab=0.13$), based on 10,000 bootstrap samples, was entirely above zero [0.03 to 0.28] for the peers' performance evaluation; and also the 95% CI [0.57, 5.2] for the indirect effect ($ab=2.26$) was entirely above zero for the lecturer's performance evaluation. Moreover, there is no evidence that competences influenced performance independently from their effect on satisfaction ($c' \leq 0.01$; $p=ns.$) in both cases. Therefore, satisfaction fully mediated the competencies-performance relationship.

¹ Data on students' participant observation can be reviewed in *Annex 1* and *2*. More details are available on request.

Table 2
Model coefficients for self-assessed competencies and satisfaction in
explaining objective performance (peers & lecturer)

[Model 4]	Consequent					
	M (Satisfaction)			Y (Performance - peers)		
Antecedents	Coeff.	SE	P	Coeff.	SE	p
X (Competencies)	0.45***	0.08	.000	- 0.01	0.11	ns.
M (Satisfaction)	—	—	—	0.28**	0.11	.01
Constant	3.08***	0.48	.000	20.29***	0.66	.000
$R^2 = 0.228$			$R^2 = 0.067$			
$F(1, 114) = 33.58***, p < .000$			$F(2, 113) = 4.05 *, p < .02$			
Total and direct effects				Indirect effect of X on Y		
	Effect	SE	t	p	Boot effect	Boot SE
Total effect of X on Y	0.12 ns.	0.09	1.29	ns.	0.13	0.06
Direct effect of X on Y	0.01 ns.	0.11	-0.05	ns.	[0.03 , 0.28]	
[Model 4]	Consequent					
	M (Satisfaction)			Y (Performance - Lecturer)		
Antecedents	Coeff.	SE	P	Coeff.	SE	p
X (Competencies)	0.45***	0.08	.000	-0.01	0.11	ns.
M (Satisfaction)	—	—	—	4.99***	0.11	.000
Constant	3.1***	0.48	.000	59.7***	8.3	.000
$R^2 = 0.228$			$R^2 = 0.127$			
$F(1, 114) = 33.58***, p < .000$			$F(2, 113) = 8.24 **, p < .00$			
Total and direct effects				Indirect effect of X on Y		
	Effect	SE	t	p	Boot effect	Boot SE
Total effect of X on Y	2.26 †	1.2	1.9	.07	2.26	1.13
Direct effect of X on Y	0.01 ns.	1.3	0.01	ns.	[0.57 , 5.2]	

Notes. Significant at: *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .01$; *Coeff* = Regression coefficients; *SE* = Standard error; *X* = Antecedent variable; *M* = Mediator; *Y* = Dependent variable. The control variables included as covariates were age, gender & course. OLS - Ordinary Least Squares Regression. Results are based on 10,000 bootstrap samples.


Furthermore, as reported in *Table 3*, other individual characteristics (conscientiousness and self-efficacy) were also predictors of students' satisfaction and the respective team's performance. The 95% *CI* [0.10, 4.4] and *CI* [0.93, 11.6] for the indirect effect ($ab = 1.39$; and $ab = 4.41$) were entirely above zero, either for conscientiousness and self-efficacy when it was the lecturer who assessed the final performance of the group. However, when peers performed the assessment, only students' self-efficacy characteristics proved to be antecedent to this mediation (95% *CI* [0.05, 0.66] for the indirect effect ($ab = 0.26$) was entirely above zero). Overall, our findings reveal that students' satisfaction mediates the relationship between individual characteristics and the team's performance results.

This study provides empirical evidence of the effects of active learning methodologies on competency development and satisfaction in predicting future team performance. Furthermore, conscientiousness and self-efficacy are also antecedents of this relationship. These findings are consistent with previous empirical research in which conscientiousness facilitates performance (Barrick & Mount, 1991), and predicts satisfaction (Judge, Heller, &



Mount, 2002; Morgeson, Reider, & Campion, 2005). Furthermore, self-efficacy (Bandura, 1986; Stajkovic & Luthans, 1998) and competencies (Witt & Ferris, 2003) are strong predictors of performance, as well as the job satisfaction-productivity link that has proved to be robust (Judge, Thoresen, Bonon, & Patton, 2001). However, this link could also be reversed; productivity could lead to satisfaction, namely, if you do a good job, you intrinsically feel good about it.

Table 3
Other explanatory variables (significant indirect effects of X on Y)

Antecedent (X)	Mediator (M)	Consequent (Y)	Boot effect	Boot SE	Bias corrected & accelerated CI
Conscientiousness	Satisfaction	Performance Peers	0.08	0.06	[-0.01 , 0.24] 
Conscientiousness	Competencies	Performance Lecturer	1.39	1.04	[0.10 , 4.4]
Self-efficacy	Satisfaction	Performance Peers	0.26	0.14	[0.05 , 0.66]
Self-efficacy	Competencies	Performance Lecturer	4.41	2.59	[0.93 , 11.6]

5. Discussion and conclusions

Our research aimed to examine the use of active learning methodologies in large classroom settings, and how they contribute to student satisfaction and team performance.

The “Consultants’ Fair” has several advantages for students, since it is a learning experience that addresses the competencies they need to become effective professionals. However, this method also has several limitations.

When group work is carried out, opportunistic behaviour can appear among some members who do not contribute equally to the group projects (Hall & Buzwell, 2013). That is, some of the members do not work at the same pace or with the same diligence as others, and therefore benefit, in principle, from the others’ work. This can be referred to as “free riding” and “social loafing”.

This potential problem could have appeared in this specific active learning technique (Bain 2004, Barkley, Major, & Cross, 2014). However, as all students had to participate collectively in the oral presentation, the problem was partially solved, since everyone had the opportunity to contribute in different ways, either by adding to the written report, designing and preparing the posters, and preparing and giving the subsequent oral presentations.

Furthermore, to prevent or overcome social loafing, we used peer and self-assessment questionnaires. Members evaluated their peers and their group’s dynamics in terms of quality and work done (Hannan & Silver, 2000).

The fact that students performed their oral presentations several times at the “Consultants’ Fair” provided them with intensive on-the-job training through ongoing practice. As a training method, it is highly effective and efficient. In real-life contexts, people will usually only have a



single opportunity to present and defend their projects. Life can give us many opportunities, but usually not in such a short period of time or in such similar contextual conditions.

These techniques are effective as active teaching and learning methodologies, but, if only one lecturer uses them, the likelihood that they will contribute to developing students' social skills and competencies is reduced. Therefore, it would be advisable for these methodologies to be applied to other disciplines. In this way, students will not only acquire the competencies needed for case study presentations, but will also learn to work on these competencies in other fields of knowledge.

Future research. In addition to enlarging the research study sample to improve its statistical power, other control conditions could be used in the future, and some of the data inputs on the recorded observations of students' oral presentations could be expanded (e.g., the first and the last presentation to assess the increased learning curve). Alternatively, the self-assessment questionnaires could be used to improve the team's project performance.

As a concluding comment, students will be able to learn better if they work in active learning environments that also encourage them to take responsibility for their own learning.

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Annex 1. Poster Presentation Evaluation (Visitor's Assessment)

Group #: _____

Evaluated by: Group # _____

(poor) (correct) (good) (outstanding)

1. **Organization:** 1 ----- 2 ----- 3 ----- 4 ----- 5 -- 6 ----- 7

- a) The poster was effective at communicating the information presented.
- b) The poster supported the material presented.
- c) Visual aides were appropriate, helpful, and easy to read.

2. **Substance:** 1 ----- 2 ----- 3 ----- 4 ----- 5 -- 6 ----- 7

- a) All important aspects of the project were covered.
- b) Relevant and interesting links to course content could be seen.
- c) Presenters showed good mastery of the topic. The flow of information was clear and logical.

3. **Preparedness:** 1 ----- 2 ----- 3 ----- 4 ----- 5 -- 6 ----- 7

- a) All aspects of the presentation were well-prepared.
- b) Presenters understood and had a complete grasp of the project/subjects presented.
- c) Presenters were able to effectively answer questions.

4. **Group Coordination:** 1 ----- 2 ----- 3 ----- 4 ----- 5 -- 6 ----- 7

- a) All members collaborated and cooperated.
- b) The members appeared to be working together to explain their projects.
- c) Effective public speeches: eye contact, clear & calm voice, and professional manner.

5. **Creativity:** 1 ----- 2 ----- 3 ----- 4 ----- 5 -- 6 ----- 7

- a) The poster was creative and captivating.
- b) It captured your attention.
- c) The members took risks in the presentation.

Total: ____/35

6. **Comments:**

Note: Highlight first a positive issue of the presentation, and then something that could be improved.

Annex 2. "Visitor's Grid" – Students' Assessment at Consultants' Fair

During the oral presentation, "visiting" students were asked to assess the oral presentation and the poster of each "Consultant Group" they visited. All consultant groups were evaluated by different small audiences (every 15 minutes). Therefore, every single visitor group was given 5–7 grids at the beginning of the "Fair" (see Annex 1 for a sample copy of the Grid Questionnaire used by visitors to assess each poster presentation).

- ❖ **Quantitative Assessment.** Visitors assessed each dimension on a 7-point Likert-scale ranging from 1 (*poor*) to 7 (*outstanding*). The questionnaire appraised five aspects of the presentation (Organization, Presentation substance, Preparedness, Group coordination & effectiveness, and Poster creativity). All scores were added up at the end, and provided together with qualitative feedback.

Finally, as a validation procedure, students were asked to rank the two best poster presentations. Group members were asked to reach consensus as groups on the two best posters. In the three editions, this ranking was always consistent with the quantitative scores received by the groups (the highest scoring groups and the best papers corresponded to the same teams).

- ❖ **Qualitative Assessments.** The *Observation Grid* also required students to give qualitative feedback on the presentations. Among all the feedback received by groups, some broad categories emerged:

- ◆ Some positive feedback categories:

- Solutions were provided to deal with the company challenge
- The poster was original and clear
- The topic and proposed solutions were interesting
- The group was professional (it interacted with the audience)
- The oral presentation was well performed (body language, eye contact, voice, dynamism, etc.)
- The group members were coordinated

- ◆ Some aspects for improvement:

- The layout of the poster elements (clarity, originality, distribution of contents, font size, etc.)
- The use of time (duration, different members' participation, etc.)
- The presenters' oral skills (if they read or spoke very quickly when they gave the presentations)
- The lack of coordination and organization among members
- The presenters' English proficiency, etc.
- The excessive amount of information, etc.

Annex 3. Web-based Survey Scales

I. The General Self-efficacy Scale (Schwarzer & Jerusalem, 1995)

Please indicate the extent to which you agree or disagree with the statements.

(1) Not at all true, (2) Hardly true, (3) Moderately true, (4) Exactly true

1. I can always manage to solve difficult problems if I try hard enough.
2. If someone opposes me, I can find the means and ways to get what I want.
3. It is easy for me to stick to my aims and accomplish my goals.
4. I am confident that I could deal efficiently with unexpected events.
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.
6. I can solve most problems if I invest the necessary effort.
7. I can remain calm when facing difficulties, because I can rely on my coping abilities.
8. When I am confronted with a problem, I can usually find several solutions.
9. If I am in trouble, I can usually think of a solution.
10. I can usually handle whatever comes my way.

II. Conscientiousness (Sub-scale of the Big-five Questionnaire (Costa & McCrae, 1992)

(1) Disagree strongly, (2) Disagree a little, (3) Neither agree nor disagree, (4) Agree a little, (5) Agree strongly

I see myself as someone who...

1. Does a thorough job.
2. Can be somewhat careless.
3. Is a reliable worker.
4. Tends to be disorganized.
5. Tends to be lazy.
6. Perseveres until the task is finished.
7. Does things efficiently.
8. Makes plans and follows them through.
9. Is easily distracted.



III. Job Satisfaction Scale (Based on Hackman & Oldham, 1975)

Please indicate the extent to which the statements represent the way you feel.

(1) To no extent, (2) A very little extent, (3) A little extent, (4) Some extent, (5) A considerable extent, (6) A great extent, (7) A very great extent

1. I am generally satisfied with the work I did in my Team project.
2. I enjoy presenting the team project at the "Consultants' Fair".
3. Generally speaking, I am satisfied with the "You be the Consultant" report.

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Institut de Ciències de l'Educació
UNIVERSITAT DE BARCELONA